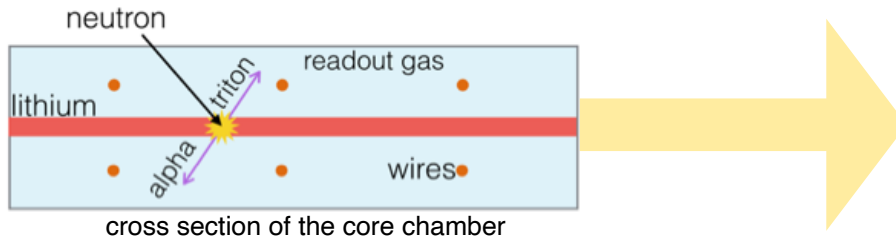


Silverside Neutron Detection Chambers

NDC-1000 SERIES

Low cost-per-count, high sensitivity neutron detection

Designed to maximize the neutron sensitivity per dollar, Silverside systems provides scalable, sensitive, long-life detection in a plug-and-play-ready format. The modular design uses enriched Li-6 metal suspended within a hermetically sealed chamber and a simple, threshold based read-out. The chamber is ruggedized for un-interrupted performance in harsh climates.

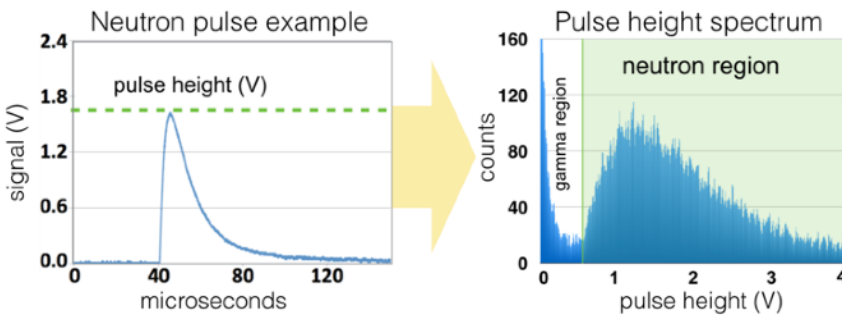


cross section of the core chamber

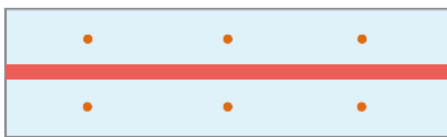


Core 2" x 8" x 36" chamber

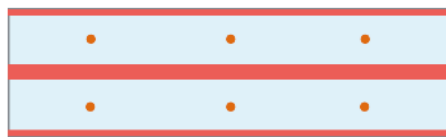
How it works: A foil of Li-6 isotope converts neutrons to other detectable particles (an alpha and triton). These particles ionize the chamber gas, and electrons produced are detected by system electronics and delivered as neutron detection events.



The core chambers come in two performance levels, **Standard** and **Plus**:



Standard, single central lithium layer



Plus: central lithium layer plus top and bottom cathode lithium layers

Thermal efficiency metrics (with He-3 tube efficiency comparison):

2 atm He-3 tube	2" cylindrical tube. 36" length	240 cps/nv
4 atm He-3 tube	2" cylindrical tube. 36" length	310 cps/nv
Silverside NDC-1001 (Standard)	2" x 8" rectangular tube. 36" length	360 cps/nv
Silverside NDC-1004 (Plus)	2" x 8" rectangular tube. 36" length	510 cps/nv

